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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

22. (Currently Amended) A method of transmitting data in a synchronous hierarchic network system comprising at least a path segment between a first network element and at least a second network element on which tandem connection monitoring method is established for monitoring transmission of information over the path segment, the method comprising:

detecting frame offset discontinuities at the first network element on the basis of detection of an alteration of a pointer value,

wherein a discontinuity condition detected at the first network element is transmitted to the second network element,

wherein, after detection and signalling of the discontinuity condition, the second network element suspends counting and evaluation of certain tandem connection errors and defect information for a predefined interval of time.

23. (Previously Presented) The method according to claim 22, wherein a discontinuity condition is signalled to an equipment management system.

24. (Previously Presented) The method according to claim 23, wherein signalled discontinuity condition information is stored in a transmission quality report.

25. (Canceled)

26. (Currently Amended) The method according to claim ~~25~~22, wherein the discontinuity condition detected at the first network element is transmitted within a defined data element of a virtual container transmitted to the second network element.

27. (Canceled)

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28. (Currently Amended) The method according to claim ~~25~~22, wherein the discontinuity condition is signalled from the second network element to an equipment management system.

29. (Previously Presented) The method according to claim 28, wherein signalled discontinuity condition information is stored in a transmission quality report.

30. (Previously Presented) The method according to claim 22 wherein, after detection of a discontinuity condition, transmitted pointer values are altered stepwise at the first network element.

31. (Previously Presented) The method according to claim 30, wherein stepwise alteration comprises:

a pointer value adjustment towards a new valid pointer value; and
at each step, introduction of a pointer value difference which is within a standardized range of pointer increment or decrement operations.

32. (Previously Presented) The method according to claim 31, wherein the distance between a last valid pointer value before and the new valid pointer value after the detected discontinuity condition is used to evaluate and select a shortest difference for a stepwise adaptation of the pointer values.

33. (Previously Presented) The method according to claim 32 wherein, in case of similar differences for increasing or decreasing of the pointer value, the direction of pointer drift before the discontinuity condition occurred is used to determine a direction for the stepwise adaptation of the pointer values.

34. (Previously Presented) The method according to claim 30 wherein, during a time interval necessary for detection and transmission of a frame offset discontinuity, a last valid pointer value received in advance of the discontinuity condition is transmitted.

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35. (Previously Presented) The method according to claim 22, wherein the first network element operates as a source network element and the second network element operates as a sink network element.

36. (Currently Amended) A synchronous hierarchic network system adapted for data transmission involving at least a path segment between a first network element and at least a second network element on which a tandem connection monitoring method is established for monitoring information over the path segment, the system comprising:

a detector for detecting frame offset discontinuities on the basis of the detection of an alteration of a pointer value,

the system further comprising means for suspending counting and evaluation of certain tandem connection errors and defect information for a predefined interval time.

37. (Previously Presented) The system according to claim 36, further comprising means for signalling a frame offset discontinuity condition to an equipment management system.

38. (Previously Presented) The system according to claim 37, further comprising means for receiving and storing discontinuity condition information received from the detector.

39. (Previously Presented) The system according to claim 36, further comprising means for evaluating and altering pointer values.

40. (Previously Presented) The system according to claim 36, further comprising means for transmitting a discontinuity condition detected at the first network element to the second network element.

41. (Canceled)

42. (New) A method of transmitting data in a synchronous hierarchic network system comprising at least a path segment between a first network element and at least a second network element on which tandem connection monitoring method is

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established for monitoring transmission of information over the path segment, the method comprising:

detecting frame offset discontinuities at the first network element on the basis of detection of an alteration of a pointer value; wherein, after detection of a discontinuity condition, transmitted pointer values are altered stepwise at the first network element;

wherein stepwise alteration comprises:

a pointer value adjustment towards a new valid pointer value; and

at each step, introduction of a pointer value difference which is within a standardized range of pointer increment or decrement operations.

43. (New) A method of transmitting data in a synchronous hierarchic network system comprising at least a path segment between a first network element and at least a second network element on which tandem connection monitoring method is established for monitoring transmission of information over the path segment, the method comprising:

detecting frame offset discontinuities at the first network element on the basis of detection of an alteration of a pointer value;

wherein, after detection of a discontinuity condition, transmitted pointer values are altered stepwise at the first network element,

wherein, during a time interval necessary for detection and transmission of a frame offset discontinuity, a last valid pointer value received in advance of the discontinuity condition is transmitted.